III. CLAIM AMENDMENTS

1. (Currently Amended) A method for preparing an interfrequency handover of a certain communication connection from a first frequency to a second frequency, said method comprising: ~~the following steps of~~
- periodically intermitting the transmission/receipt of data on the first frequency for certain transmission gaps, where the number of transmission gaps is at least one during each transmission period, a certain sequence of transmission periods is used, and at least one transmission period has a transmission gap having a first duration and a second transmission gap having a second duration, which second duration is different from the first duration, and
- performing measurements on the second frequency during the transmission gaps on the first frequency.

2. (Currently Amended) A method according to claim 1, comprising further ~~the following step of~~ receiving system information on the second frequency during a transmission gap on the first frequency.

3. (Currently Amended) A method according to claim 1, wherein ~~in~~ the step of intermitting the transmission/receipt of data, all the transmission periods are identical from the beginning of the first transmission gap within a transmission period to the end of the last transmission gap within the same transmission period.

4. (Currently Amended) A method according to claim 1, wherein ~~in~~ the step of intermitting the transmission/receipt of data, a certain number of transmission periods is repeated cyclically.

5. (Currently Amended) A method according to claim 1, comprising further ~~the following steps of~~:
- coding original data before transmission and

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- transmitting coded data in a first frames, during which the transmission is continuous,
and wherein the step of intermitting the transmission/receipt of data comprises ~~the substep of~~ transmitting coded data in a second frames, during which the transmission/receipt of coded data is intermitted.

6. (Currently Amended) A method according to claim 5, wherein the amount of coded data transmitted in the first frames and in the second frames corresponds to a ~~certain~~ fixed amount of original data.

7. (Currently Amended) A method according to claim 6, wherein the step of intermitting the transmission/receipt of data further comprises the ~~following substep of~~ puncturing the coded data transmitted in the second frames, so that the amount of transmitted coded data in the first frames and in the second frames corresponds to said fixed amount of original data.

8. (Currently Amended) A method according to claim 5, wherein:
- the frames comprise a certain number of time slots,
- ~~in~~ the step of intermitting the transmission/receipt of data, transmission/receipt is intermitted during said transmission gap having the first duration during certain first time slots of a frame and during said transmission gap having the second duration during certain second time slots of a frame, which second time slots are not the same time slots as the first time slots.

9. (Currently Amended) A method according to claim 8, wherein ~~in~~ the step of intermitting the transmission/receipt of data, ~~the~~ said transmission gap having a first duration occurs during two sequential frames and ~~the~~ said transmission gap having a second duration occurs within one frame.

10. (Original) A method according to claim 9, wherein the second duration is shorter than the first duration.

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11. (Original) A method according to claim 10, wherein the first duration is substantially twice the second duration.

12. (Currently Amended) A method according to claim 11, wherein substantially half of the transmission gap having the first duration occurs during ~~in the previous frame~~ at the end of the first frame and at the beginning of the second frame of said two subsequent frames.

13. (Currently Amended) A method according to claim 12, comprising further ~~the following steps of~~:
- coding original data before transmission, and
- transmitting coded data in first frames, during which the transmission is continuous,
and wherein the step of intermitting the transmission/receipt of data comprises ~~the substep of~~ transmitting coded data in second frames, during which the transmission/receipt of coded data is intermitted, and
- before transmission, puncturing the coded data transmitted in the second frames, so that the amount of transmitted coded data in the first frames and in the second frames corresponds to a ~~certain~~ fixed amount of original data.

14. (Currently Amended) A method according to claim 1, comprising further ~~the following steps of~~:
- deciding the number of transmission gaps within each transmission period,
- deciding the duration of each transmission period,
- deciding the duration of each transmission gap,
- deciding the durations between the transmission gaps, and
- transmitting information about the duration of each transmission gap and the durations between the transmission gaps from a cellular network to a mobile station.

15. (Original) A method according to claim 1, wherein there are two transmission periods having different durations.

16. (Original) A method according to claim 1, wherein all transmission periods have the same duration.

17. (Currently Amended) A mobile station comprising:
- means for receiving data on a first frequency,
- means for intermitting periodically the receipt of data on the first frequency during certain transmission gaps, where the number of transmission gaps is at least one during each transmission period, a certain sequence of transmission periods is used, and at least one transmission period has a transmission gap having a first duration and a second transmission gap having a second duration, the first duration being different from the second duration,
- means for receiving information about the durations of at least two transmission gaps, and
- means for performing measurements on a second frequency during the transmission gaps.

18. (Original) A mobile station according to claim 17, comprising further
- means for receiving system information an a second frequency during the transmission gaps on the first frequency, and
- means for determining a scrambling code group using the received system information.

19. (Original) A mobile station according to claim 18, wherein it is a UMTS mobile station.

20. (Currently Amended) A network element comprising:
- means for transmitting data on a certain frequency, ~~and~~
- means for intermitting periodically the transmission of data related to a certain communication connection during certain transmission gaps, where the number of transmission gaps is at

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least one during each transmission period, a certain sequence of transmission periods is used, and at least one transmission period has a first transmission gap having a first duration and a second transmission gap having a second duration, where the first duration is different from the second duration, and
- means for receiving information about the duration of at least two transmission gaps within one transmission period.

21. (Original) A network element according to claim 20, wherein it is a base station of the UTRA network.

22. (Currently Amended) A network control element comprising:
- means for defining a certain sequence of transmission periods, where the number of transmission gaps is at least one during each transmission period,
- means for deciding a first duration for at least a certain transmission gap and a second duration of a second transmission gap, where the first duration is different from the second duration and said transmission gaps are within at least one transmission period,
- means for transmitting information about the transmission periods, and
- means for transmitting information about the duration of at least two transmission gaps within one transmission period.

23. (Original) A network element according to claim 22, wherein it is a radio network controller of the UTRA network.